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DECENTRALIZATION OF CITIES IN THE AUTOMOBILE AGE

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For the past decade an insidious movement has been going on in our cities, not only in Oregon but in all parts of the country, which has, for lack of a better name, been called decentralization. The outward manifestation of decentralization is a two-fold movement: (1) The shifting of business units to sites beyond the central hub of the city. The common form is found in the development of subcenters located on the approaches to the city. Downtown merchants are finding that their customers are leaving them to trade with mushroom stores in the outlying area. (2) The development of residential areas at and beyond the city limits into suburbs having the advantage of urban service and rural tax rates. Each movement may leave behind it empty stores downtown and vacant patches in what would normally be residential districts.

The Urban Land Institute of Chicago has made a careful study of 221 cities in an endeavor to locate the causes of this decentralization process, and has made the following findings: (1) The chief cause was found to be traffic congestion in the central business area. Specifically, this is the problem of the automobile—both parked and in motion—which fills the streets and places the pedestrian at an increasing disadvantage. There are really two parts to this problem.

The first is the problem of terminal facilities for the automobile. Our older city plan was pretty well anchored by the street layout and the transportation system, particularly the streetcar and rails. Rarely would a streetcar company accommodate traffic by moving its rails; rather, users adjusted themselves to the existing transportation lines.

The advent and increasing use of the automobile has changed all this. The population has become fluid because it does not have to follow a track. It may go where it pleases, provided there are streets, and the city has accommodated the automobile user by providing the streets where he wants to go. The result is that streetcar companies have lost traffic and, to accommodate the whims of users, have adopted busses and trackless trolleys in an effort to keep up with the changing demands of transportation users.

The older city merely required terminal facilities for the passengers of a public conveyance. The user of the automobile must have terminal facilities for his private means of conveyance. If he cannot find it in the down-

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POSTWAR EFFECTS OF WARTIME ECONOMIC CHANGES

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In the course of World War II great changes were made in the American economy. Controls of many kinds, priorities, allocations, rationing, "set aside orders," and price regulations were introduced. Even more important were the changes in the nature and location of the economic activities carried on. Clerks became shipfitters, housewives became welders, service-station owners became timekeepers, through an almost endless list of occupational transformations. Furthermore, the greatest migration of people in all our history took place. People from the country moved to the city, people from the South moved to the North, people from all over the country moved to the West Coast—particularly to California. From a peacetime point of view many of these changes were completely abnormal, and further changes are to be expected as we adjust ourselves to a new peacetime organization of economic activity. On the other hand, the things that happened to us during the war are not reversible. Our wartime experiences are not like a movie film, which now in reconversion can be run backward to bring us to the same sort of business and economic world as that from which we started in 1939.

There will be changes resulting from the more-rapid utilization of our resources during the war. There will be war-built plants, and accumulated stocks of many kinds. Furthermore, wartime distortions in production will have their counterpart in postwar distortions in economic activity. This is most clearly seen in consumer durable goods, production of which was a mere trickle during the war, but which will soon swell to a flood. The demand will come not only from those who would have bought if war had not intervened, but also from the millions whose wartime savings and higher postwar incomes make possible a new and higher scale of living.

There are those who deplore this new-found opulence

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POSTWAR EFFECTS OF WARTIME ECONOMIC CHANGES

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of the lower-income groups, and who would have us return to the more frugal, and presumably more virtuous, days of the 1930s. A less-biased view, however, can hardly fail to see in the increase in American production during the war the greatest of all challenges to our economic system, and the greatest hope for the economic well-being which is not only an important end in itself, but the indispensible basis for political stability and peace. It is also possible that the increased incomes of the lower-income groups provide the basis on which, during the postwar boom which is now under way, the foundations for a more productive and stable economy can be laid.

The great wartime transformation of our economy is epitomized in the changes in the national income, which rose from $73 billion in 1939 to $161 billion in 1945. After all allowances are made for changes in the price level, these figures record the most remarkable expansion of production yet known. It was achieved during a period in which the total civilian labor force actually declined, but in which unemployment fell from over 10,000,000 in 1939 to 680,000 in December 1944. The per-capita income for the country as a whole rose from $539 in 1939 to $1,117 in 1944. Surely these are gains that must be held.

Professor Alvin Hansen in this country and Sir William Beveridge in Britain—to mention only two of the better-known names—propose that stable full employment should be achieved through a governmental fiscal policy which would provide, through deficit financing of public works, the necessary demand for goods and services. A related proposal is that of H. Gordon Hayes, who advocates government ownership of railroads, public utilities, and businesses in other fields now dominated by private enterprise, with the purpose of maintaining consumption at a level high enough to provide the necessary stability in employment. These proposals are based upon the conviction that our prewar economy suffered from grave functional disorders. There can be no doubt that this was the case, and that we must discover the remedies—even if they involve the excision of large segments of the private-enterprise system. But the great improvement which the war brought in the functioning of our economic system was accompanied by important anatomical changes as well, and some study of the anatomy of the wartime economy is a prerequisite for intelligent consideration of the possibilities for further functional disorders in the future, and of the feasibility of proposed remedies.

The most striking change in the pattern of economic activity was the tremendous increase in manufacturing. In 1939 the income derived from manufacturing activity was about $17.5 billion; by 1943 this had increased to over $48 billion. No other segment of our economy had a comparable expansion. Even the income associated with governmental activities was far behind manufacturing, although it expanded from $10 billion in 1939 to $25 billion in 1943. Agricultural income registered remarkable increases—from $5 billion to $14 billion—but still accounted for less than one-third as much of the national income as did manufacturing. All segments of the economy contributed to the increase in income, b' these three categories—manufacturing, government, and agriculture—contributed the most, and the contribution of manufacturing was greater than the other two combined.

The outstanding wartime change in the American economy was increased industrialization. Before the war less than one quarter of the national income came from manufacturing. Toward the end of the war almost one third of our income came from this activity.

It is most significant that the striking wartime increase in the national income was so closely associated with a greater industrialization of the economy. Is it possible that we can maintain the national income at wartime levels without maintaining this new high level of industrialization? That is extremely doubtful. If manufacturing should decline in importance, what activities would take its place? A brief survey of the possibilities will show that they are very limited.

The relative importance of agriculture has been declining from colonial times down to the present. The war boom in agricultural income is clearly a temporary phenomenon. With improved methods and more machinery, the proportion of our population necessary to produce raw foods and fibers has been constantly declining. This trend would be reversed only in the event that major new demands for agricultural products should arise. This does not seem likely.

Governmental functions have been continuously expanding, and the end of this process is not in sight. But peacetime activities are far less extensive than those of a nation at war, and we must expect that for some time income payments by the government will be less important than they have been for the last five years.

It might be suggested that the service trades could expand to compensate for a decline in the relative importance of manufacturing, government, and agriculture. During the prosperous 1920s there was an increase in the importance of service industries, and a widespread tendency to think of higher levels of consumption in terms of more services—beauty parlors, laundries, education, professional services of all kinds, amusements, and the many other similar activities which are associated with greater ease in living. May we not expect, therefore, that the continuation of present income levels will result in great increases in employment in the service industries? There can be little doubt that an expansion in service occupations is under way. But income from such activities had already increased by $7 billion during the war, and further expansion, even though considerable, could hardly be sufficient to compensate for the decline in governmental payments, to say nothing of decline in manufacturing and agriculture.

Edward F. Denison presented a study of the service industries in the *Survey of Current Business* for January 1945, entitled, "Service Industries—Trends and Prospects." His conclusion was that "the total number engaged in the service industries in the post-war period is not likely to increase greatly from either the 1941 or

1943 totals, even if employment generally is high, unless new developments not yet in sight occur. In fact, the relative importance of the industry, as measured by the number engaged, is apt to be less than in the pre-war period as a result of a decline in household employment and the mere maintenance of the relative position of the other service components combined." This conclusion is based in part on the fact that service industries were employing a declining proportion of nonagricultural workers from 1870 to 1920 (the increase in the twenties being a reversal of trend), and in part on a detailed analysis of the prospects for the different types of service occupations.

Wholesale and retail trade offer prospects for increased employment. But in these fields there is much competition, and the pressure toward more efficient distribution and reduced labor costs conflicts with the tendency to offer more frills and service to the customer. Although there will undoubtedly be increases in income attributable to expanding trade, they will be small as compared with decreases in the income derived from manufacturing and governmental activities.

One of the most hopeful fields for expanding activity is construction. The great shortage of housing and of commercial and industrial building will certainly be the basis for a great construction boom during the next few years. It also seems likely that there will be much new road building and an increase in other public works. But as compared with manufacturing, construction is a relatively small segment of our economy. In December of 1944 there were 26 times as many persons employed in manufacturing as in construction. Even with a considerable decline in manufacturing and a doubling of construction employment by December 1945, there were still 10 times as many persons employed in manufacturing. It is not conceivable that construction could expand sufficiently to fill the gap if manufacturing should decline to its prewar position in relation to all economic activity.

Transportation and public utilities also have prospects for increased employment, but they are not as promising as construction; and there is little reason to suppose that in the future the American people are going to spend a much larger proportion of their incomes for these services.

The nature of the problem we face can be seen in miniature by looking at the changes in nonagricultural employment which occurred between December 1944 and December 1945. They were as follows:

Decreases	
Manufacturing	3,759,000
Government	403,000
Mining	4,000
Total	4,166,000
Increases	
Construction	448,000
Service and miscellaneous	418,000
Trade	373,000
Transportation	122,000
Total	1,361,000

Government employment, of course, continues to decline; and, if manufacturing employment should continue to fall at the rate of 1945, there would be no escape from rapidly rising unemployment. Fortunately, as reconversion proceeds manufacturing will be stabilized, and industrial employment will increase. The pent-up demand for manufactured goods is so great that for some little time we may expect this segment of our economy to operate at levels rivaling those of the war. If this can be sustained permanently we shall have high employment and a continuation of present income levels. But this means an economy much more highly industrialized than the prewar economy. Under what conditions can we expect to continue this high level of manufacturing activity?

It is obvious that one means is through the development of new industries, the products of which will attract consumers as their demand for housing, automobiles, washing machines, and other manufactured products is satisfied. Not only would such industries maintain consumer expenditures for goods and services, but the equipment of these industries would provide an outlet for the increased savings which are a result of our increased national income. This would call for a much more dynamic economy than we had before the war. New products and new techniques would have to appear at an ever-increasing rate. Some people, like George Terbourgh in his book, *The Bogey of Economic Maturity*, seem to feel that our private-enterprise economy, if given the opportunity, will be sufficiently dynamic to absorb almost any amount of savings. Others, like Alvin Hansen, are dubious about the prospects for expansion of present industries and the development of new businesses at a fast-enough pace.

Our experience during the depression of the 1930s should have taught us that it is foolhardy to believe that the demand for goods will always be great enough to keep industry running at reasonably full capacity. Savings during the war were tremendous; although they will certainly decline, they are likely to remain very great if the national income remains high. Since they are not used for the purchase of consumer goods and services, expansion of capital equipment and inventories must be at a rate adequate to absorb them—or employment must decline.

It is conceivable, however, that the present levels of the national income have been associated with changes in income distribution which will result in increases in consumer demands sufficient to absorb the output of our enlarged industrial capacity. No one would deny that there are enough persons in the United States who need the products our factories can produce to keep the plants running at capacity, if these persons had the necessary income. If, therefore, the expanded national income were to go largely to the lower-income groups, it would result in increased consumer expenditures and reduced savings, and would offer the prospect of a more stable postwar economy. A most important question, therefore, is that of the end results of the industrial and population shifts of the war on the distribution of income.

Detailed estimates of the changes in the distribution of income are not available. Some hint of greater equality of distribution is found in the increased proportion of the total national income which has taken the form of

compensation of employees. This proportion was 68.3 per cent for 1939 and 71.1 per cent for 1945. Another clue may be found in the geographical distribution of income in the country. In 1939 per-capita income varied from $201 in Mississippi to $825 in New York state and $1,031 in Washington, D.C. If the economic changes of the war were most pronounced at the lower-income levels, this should be reflected in greater increases in income in states like Mississippi than in states like New York. By 1944 the per-capita income in Mississippi had increased to $528, a remarkable increase; income in New York state had increased to $1,519. The increase in Mississippi was $327 per capita, in New York state it was $694 per capita. In percentage terms the increase in Mississippi was 163 per cent, while in New York state it was 84 per cent. This pattern is typical of what happened throughout the country. The largest relative changes came in the low-income states, but the largest absolute changes were found in the high-income states.

Because these state income figures are averages they do not show conclusively what has happened to the distribution of income. They suggest, however, that there have been important increases in income at the lowest levels, and that even more substantial increases in dollar terms have been gained by persons with larger incomes. They indicate higher levels of consumer expenditures in the future, but it is not possible to judge whether or not savings will also be greater.

The great geographical variations in income give pertinence to an inquiry concerning the effects of war production on the distribution of industries. We have in this country what the British call "distressed areas." It is possible that the increase in employment and industrial plants was so distributed as to relieve this distress. The problem can be considered both from the point of view of employment and from the point of view of the location of new industrial facilities.

The great industrial area of this country is a tier of states running south of the Great Lakes, and extending to the Atlantic Coast. It includes two of the regional groupings used by the Bureau of the Census: the Middle Atlantic states, which include New York, New Jersey, and Pennsylvania; and the East North Central states, consisting of Ohio, Indiana, Illinois, Michigan, and Wisconsin. In 1939 these eight states accounted for 63 per cent of all employment in manufacturing in the country, the Middle Atlantic states ranking slightly ahead of the East North Central states. By 1943 manufacturing employment in these states had increased by 3,000,000 employees. This was slightly more than the increases in all the other states put together. The East North Central states pushed ahead of the Middle Atlantic, and became the country's leading industrial region. In general, increases in manufacturing employment were proportional to employment in 1939, except that Atlantic Coast states gained somewhat less, and Pacific Coast states very much more than the average for the entire country. In the Pacific Coast states manufacturing employment increased from 580,000 to 1,441,000. But this still left these states far behind the East North Central states, with their 4,444,000 manufacturing employees. The far-western region has relatively high incomes, and was not one of the distressed areas.

Very much the same picture is revealed by a study of new manufacturing facilities built during the war. Th East North Central and Middle Atlantic states received almost exactly half of these new facilities. Futhermore, the new plants built in these areas were more generally serviceable for peacetime operation than the facilities built in other areas, where munitions and other special-purpose plants predominated. It must be concluded that war-induced changes in industrial location will not contribute greatly to more equal distribution of incomes.

The problem of geographical disparities in economic opportunities can be attacked in another way. If the manufacturing plants will not move to the distressed areas, people from the distressed areas can move to the industrial regions. The wartime population movement was the greatest in our history. People moved from state to state for a variety of reasons, not the least of which was the prospect of larger income from employment in manufacturing plants. They came for the most part—but not entirely—from the low-income, distressed areas. But it is not possible to explain the movement of civilian population entirely in terms of expanding manufacturing employment. The outstanding migration was the net movement in the three and one-half years from April 1940 to November 1943 of 1,400,000 persons to California. The state which ranked second in number of new residents received, Michigan, had a net migration of 281,000. Eighteen states, other than California, gained from the population movement; but the increase in the population of all these states combined was only 1,000,000 more than the influx into California alone.

A number of factors combined to bring the great population movement to California. It is worthy of note that, even after this migration had taken place, per-capita income in California was still $1,480, a figure among the highest in the country.

The great population movement during the war indicates that the American people are still tremendously mobile, and suggests that movement of workers is a practicable solution of the problems of inequality of income and distressed areas. It may be that no greater contribution to prolonged high employment could be found than that of facilitating the movement of workers during the postwar boom. It is most unfortunate, therefore, that Congress has decided to dismantle the United States Employment Service, the only agency equipped to facilitate the movement of workers on a national scale.

Judged by our war experience, migration of workers is a feasible way of equalizing economic opportunity. It also appears that more nearly equal distribution of income—however desirable on other grounds—is the most desirable method of assuring the demand for goods and services which is the indispensible condition for prosperity and full employment.

More than one quarter of the wage and salary workers in the United States were covered by collective agreements before the war.

DECENTRALIZATION OF CITIES IN THE AUTOMOBILE AGE

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town business district, he will find it somewhere else. Foresighted retailers, sensing this demand, have located in places where terminal facilities for automobile parking can be provided.

The second part of the problem has to do with the unloaded users of transportation who have now become pedestrians. With streets narrowed by parked automobiles and street crossings congested with moving automobiles, the pedestrian is facing increased hazards in movement. To get automobiles off the street and into the garages and parking lots, more sidewalk crossings are necessary and alley ways become traffic ways. This dual automobile congestion tends to drive the pedestrian out of the business area to a place where he can shop with greater convenience and safety. And we must not lose sight of the fact that all shopping is done by pedestrians.

(2) Poor streets and poor street planning. Streets in downtown business districts are often narrow and the streets leading in to them poorly paved. Where a state highway enters the city, there is usually good pavement. People tend to follow the good roads. It is not surprising that subbusiness developments occur along streets which are part of the state highway system.

(3) The rigidity of local tax systems. Because of the present demand for municipal revenue and the inability of a large number of people to pay taxes, pressure has been put upon the users of land in the downtown district. Assessed valuations in the central business area are often out of proportion to the income which the properties are capable of producing. Since a merchant cannot carry the high taxes imposed upon him in this district, he is forced to move out to a low-taxing area. Perhaps a failure to completely revaluate land in the downtown business district has been an accelerating cause for the decentralization process.

(4) Bad zoning and a lack of zoning and planning, which has permitted decentralization which might not otherwise have occurred. The lack of zoning or poor zoning creates a vicious circle: A business house invades what was formerly a residential area. Those in the residential area object to the confusion, congestion, and noise that is created by this intruder. They in turn get out further and further until finally they are beyond the city limits. Since home ownership is no longer secure in the close-in areas, because of a lack of proper zoning, new home construction is often developed in areas in suburban communities where home owners predominate and where zoning laws for the protection of the home can be maintained and enforced.

(5) The labeling of certain streets as through streets to accommodate fast-moving traffic. Dangers heretofore not found spring up in areas connected with these streets. Parents with children are worried constantly by automobiles speeding past their front doors.

The Institute lists several other causes of lesser importance but, as a rule, they do not pertain to communities in Oregon, which are relatively free from industrialization, population mixtures, and corrupt politics.

When the problem of decentralization has been seen to be an actuality and not merely a threat, merchants and property owners have called upon the city fathers to do something. But, in our usual fashion, we have looked at the outward effect of the malady and have not paid a great deal of attention to the fundamental cause. We have attempted to heal the wound from without rather than from within. Where decentralization has been considered simply as a problem of dealing with downtown parking and traffic, streets have been widened, more stop streets have been designated, traffic signals have been installed, safety islands, pedestrian zones, and walkways have been created; the latest development is the use of parking meters.

To some extent these devices have alleviated the excessive traffic congestion, but they have not stopped decentralization. Some of these palliatives have simply added great difficulties for the pedestrian, the automobilist, and the retailer. Since we have not solved the problem by traffic-control devices, it might be wise for us to center attention upon basic remedies rather than upon sedatives and aspirin. The first approach may be to start with an open mind. If decentralization is inevitable, why should we try to stop it? Maybe our town in the future will be more and more decentralized.

It should be remembered that the cities we are accustomed to had their beginnings in the horse-and-buggy and trolley-car days. It may be a physical impossibility for us to operate the number of automobiles we do and still expect the city to remain intact. If this conclusion is reached, then city planning should accept decentralization and merely attempt to prevent its becoming excessive. If cities want to retain some semblance of their former downtown districts, then it is incumbent upon somebody to provide parking facilities off the street and out of the path of the pedestrians who are on their way to make purchases. This may involve municipal parking lots or parking lots and garages cooperatively owned by merchants. But these lots will merely provide terminal facilities for the automobile. There still must be provided egress and ingress. This means wider streets or better-paved streets for some cities, which means more taxes. The tax burden must be carefully assessed or home owners will seek escape by going beyond the city limits.

We have become riders instead of walkers. Twenty years ago most of us thought nothing of walking a mile; now the average person becomes exceedingly annoyed if he cannot get his car within fifty feet of his destination. Perhaps we might do something to change the habits of the people. But how? The only way to break a habit is to attach a severe penalty. The penalty of congestion, however, has not landed on the pedestrian so much as it has on the retailer. There appears to be little that can be done in this direction, unless we adopt drastic measures which will make the operation of the automobile more expensive, and such measures would be to the disadvantage of those people whose livelihood depends upon extensive automobile operation.

It does not appear that we are going to stifle the decentralization process by action against the individual. Rather we must face the fact that decentralization, particularly in the larger cities, is a bursting process, a measure to relieve congestion. Our concern is that utter chaos does not result. We need to exert some control on the forces which cause decentralization, with the hope that we can direct them.

One of the best devices for control is properly studied zoning. Cities in California, despite their stupendous growth, have had a fairly orderly development because zoning was started early. When zoning is attempted after a city has established its pattern, it meets with all types of difficulties, greatest of which is the opposition of property owners who see an immediate disadvantage to them, but fail to see the long-run advantage. Lack of zoning may, it is true, allow certain properties to advance quickly in value. But this is always accompanied by a reverse action on other values. Zoning tends to level out values and stabilize them, and the community is better off when property values are not subject to violent fluctuations in price.

Zoning confines commercial uses to one part of the city, industrial to another, residential to another, etc. It prevents one from encroaching on another and disturbing values. Zoning can be made flexible so that expansion can take place, but can at the same time be controlled.

The inadequacy of zoning as a complete measure to direct the orderly design of the city pattern is traceable to the present limitation of its scope of operation. Zoning in Oregon is still "city zoning." Rarely does the county enter the picture. While a city can regulate land uses within its own political boundaries, it is helpless outside. Our laws still think of the city as an area bounded by somewhat arbitrary political boundary lines. We ignore the fact that much adjacent land is economically a part of the city even though it is not politically included. The inhabitants on the land may work in the city, trade in the city, and be identified as "city" people. But, because they are not political residents of the city, they may use their land as they see fit with no regard for city zoning laws. When zoning laws hamper individuals they go outside the city limit, and down totters the attempt of zoning to develop an orderly pattern.

A typical example of this process is to be found in Klamath Falls. According to the census, Klamath Falls grew but slightly from 1930 to 1940. Actually this "city" (using quotes) had very substantial growth in population; but a large part of it, some 9,000 people, was in the Altamount district of Klamath County, on either side of the highway approaches to the city proper. Thus, half of Klamath Falls is outside of Klamath Falls. This outside growth not only disturbs land uses within the city but it brings with it a host of problems in regard to public health, equitable tax levies, school facilities, police and fire protection.

In conclusion, we may say that, while the disintegration of our commercial and residential centers is deplorable, we must recognize that perhaps decentralization is the inevitable result of our extensive use of the automobile. We can do one of three things: (1) do nothing and let the decentralization run rampant; (2) curb the use of the automobile; or (3) provide city and extracity or county zoning to keep decentralization within limits. The last appears to be the most logical.

McNARY POWER NEEDED FOR SUPERSONIC RESEARCH

(From *Progress Report of the Oregon Postwar Readjustment and Development Commission*, Apr. 1946)

While five groups have been marshalling opposition to the McNary multiple-purpose dam on the Columbia, at least four of the groups have been set back upon their heels by a revelation from Senator Guy Cordon, Oregon's senior senator, that engineers of the National Advisory Council of Aernonautics are considering the construction of a mammoth experimental plant in the Pacific Northwest to conduct supersonic research.

Negotiations had been under way and under cover with Bonneville Power Administration when Senator Cordon "broke" the story. NACA engineers and W. Stuart Symington, Assistant Secretary of War for Aviation, explain that a tremendous load of power will be required and, that, up to this time, the Northwest is in a better position to furnish cheap power than Boulder Dam or other western hydro developments—but the Northwest will require even more power than is now available to meet the demand of a laboratory that will cover many square miles. Estimated cost of the research project is placed at $500 million.

Groups which have been opposing McNary Dam are: (1) commercial fishing interests on Columbia River; (2) National Association of Electric Companies; (3) John L. Lewis of United Mine Workers; (4) eastern interests apprehensive that power will cause many industries to move to the Northwest; (5) part of the congressional delegation of Washington state.

Columbia River commercial fishing interests have contended that additional dams will destroy the salmon run. Officials of the Federal Fish and Wildlife Service (formerly the Biological Survey) have studied the fish angle and state that, while the run will be slightly less than at present, McNary Dam will not exterminate the salmon. The investigation has not been completed but is continuing. This progress report of the Fish and Wildlife Service has swung Representative Henry Jackson, Washington, to the support of the dam.

The National Association of Electric Companies is opposed in principle to any further Federal development of dams with power, since government power competes with free enterprise.

Mr. Lewis is opposed to increasing the kilowatts in the United States, for each additional installation of hydro he regards as a threat against his miners' union, for hydroelectric generators do not require coal. This is also his objection to the proposed St. Lawrence waterway. Railroads hauling gondolas of coal share the views of Mr. Lewis. Coal-mine operators agree with Mr. Lewis and the railroads. However, coal is a minor factor in the economy of the Pacific Northwest, since this is essentially an area of falling waters—ideal for hydro power.

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INDEXES OF THE COST OF GOODS PURCHASED BY MODERATE-INCOME FAMILIES IN PORTLAND, OREGON

(1935-39=100)

(Sources: U. S. Bureau of Labor Statistics)

Date	All items	Food	Clothing	Rent	Fuel, electricity and ice	House furnishings	Misc.
1914: Dec.	77.7	85.4	78.6	120.5	74.1	62.2	57.4
1915: Dec.	74.8	81.9	81.0	107.4	73.4	64.0	55.6
1916: Dec.	80.7	93.2	91.1	96.9	76.6	73.4	60.9
1917: Dec.	97.8	119.5	113.5	93.8	89.1	96.0	75.3
1918: Dec.	123.7	145.7	154.6	135.4	97.0	129.9	90.6
1919: June	128.3	145.9	169.4	144.9	97.3	138.1	93.1
Dec.	141.0	165.6	190.4	153.9	105.4	152.4	98.5
1920: June	156.8	200.4	203.3	160.6	108.9	176.5	103.1
Dec.	139.6	148.5	174.6	165.0	122.9	174.0	103.9
1921: May	127.2	117.3	150.3	172.2	123.8	154.2	103.9
Sept.	126.5	126.2	134.0	172.7	117.8	141.0	103.8
Dec.	124.7	123.0	130.0	172.7	118.1	137.9	103.3
1922: March	120.9	117.0	122.3	172.6	115.8	127.2	102.6
June	120.6	118.2	120.5	172.7	111.4	125.5	102.4
Sept.	122.1	120.8	120.6	173.2	117.8	124.5	103.6
Dec.	122.8	122.0	121.8	173.1	122.8	126.1	102.9
1923: March	122.1	116.9	126.0	173.0	126.1	130.2	102.2
June	122.3	120.7	126.8	171.8	119.5	130.4	109 9
Sept.	123.4	123.9	127.2	171.9	120.1	130.3	101.2
Dec.	124.4	124.5	127.2	172.0	123.8	129.9	103.0
1924: March	123.0	120.2	127.5	172.8	122.5	128.2	102.5
June	121.4	121.2	126.7	172.7	115.2	125.7	99.3
Sept.	122.2	125.1	124.8	172.2	116.5	125.2	99.0
Dec.	122.5	123.7	125.2	172.2	120.3	125.7	100.1
1925: June	123.5	132.0	123.9	169.8	112.8	123.5	99.3
Dec.	123.8	132.2	123.4	168.9	118.6	124.7	99.3
1926: June	122.2	129.3	123.0	166.2	111.8	121.3	99.9
Dec.	121.8	128.2	121.1	160.9	120.0	118.5	101.3
1927: June	121.7	131.0	120.5	157.1	116.3	116.7	101.2
Dec.	119.6	125.1	118.8	153.0	122.8	115.7	101.6
1928: June	117.6	124.7	118.6	145.7	112.3	112.2	101.2
Dec.	118.3	127.1	117.5	140.3	120.8	112.0	102.1
1929: June	116.8	127.5	116.7	133.8	112.2	111.7	101.7
Dec.	117.8	130.3	116.2	130.4	119.9	112.5	102.0
1930: June	116.7	125.6	113.9	127.0	110.9	111.0	107.1
Dec.	109.7	107.6	108.8	123.4	115.2	105.5	106.2
1931: June	104.4	98.1	104.5	119.0	101.1	103.1	105.3
Dec.	101.4	94.5	96.9	113.1	103.8	97.5	104.9
1932: June	94.4	83.6	91.1	104.6	91.1	88.7	103.0
Dec.	91.8	82.0	86.5	97.6	92.6	84.8	101.5
1933: June	88.6	80.5	87.0	91.7	88.8	85.5	96.1
Dec.	90.5	81.8	95.8	87.7	100.3	93.7	95.9
1934: June	91.9	85.4	97.8	87.1	100.1	95.0	96.0
Nov. 15	94.1	92.4	97.3	87.0	98.0	97.0	96.4
1935: March 15	96.4	97.4	97.2	87.6	98.1	98.2	98.0
July 15	95.5	94.8	97.3	87.9	97.5	97.4	97.9
Oct. 15	95.7	95.9	97.4	90.3	99.1	97.7	96.4
1936: Jan. 15	96.8	98.1	97.7	91.1	100.8	96.1	97.0
Apr. 15	96.2	97.6	98.1	91.9	100.9	96.9	95.1
July 15	98.2	100.4	97.7	94.1	97.0	96.2	98.3
Sept. 15	99.3	102.0	97.6	96.7	100.9	96.5	98.6
Dec. 15	99.4	100.3	99.0	98.4	102.6	97.3	98.7
1937: March 15	102.0	105.3	101.0	100.1	103.0	100.8	100.0
June 15	103.0	107.5	101.9	102.3	97.8	102.4	100.3
Sept. 15	104.7	107.1	103.5	106.2	101.9	104.9	102.6
Dec. 15	103.2	101.7	103.2	107.3	101.6	104.9	103.1
1938: March 15	102.7	100.7	102.0	107.4	101.6	103.6	103.1
June 15	101.7	99.4	101.6	107.1	100.3	101.4	102.2
Sept. 15	101.6	98.8	101.3	107.3	100.8	101.5	102 1
Dec. 15	101.7	99.6	101.1	107.0	101.2	101.6	102.0
1939: March 15	100.7	97.5	100.7	106.7	99.2	100.7	101.5
June 15	100.5	97.2	100.7	106.5	98.4	100.1	101.6
Sept. 15	102.1	101.6	100.9	106.8	99.0	100.7	101.8
Dec. 15	100.9	97.9	101.6	106.3	99.0	102.5	101.3
1940: March 15	99.7	95.6	103.1	106.2	92.7	100.3	101.2
June 15	100.7	99.8	103.2	106.5	91.6	99.9	100.3
Sept. 15	101.5	100.5	102.9	106.7	93.2	100.4	101.5
Dec. 15	101.8	100.7	102.8	107.0	94.6	100.4	102.1
1941: March 15	102.7	102.8	102.9	107.2	94.8	101.5	102.4
June 15	106.2	110.2	103.9	108.8	95.3	105.8	104.3
Sept. 15	111.0	119.9	110.1	110.5	98.2	109.5	105.5
Dec. 15	113.7	121.3	113.0	112.6	102.9	115.7	108.7
1942: March 15	119.1	129.6	122.4	114.4	106.7	121.0	111.8
June 15	122.1	134.6	124.5	117.6	110.1	121.4	112.8
Sept. 15	124.9	141.2	126.0	115.6	116.5	121.8	113.2
Dec. 15	126.8	145.9	125.9	115.2	116.6	121.2	114.1
1943: March 15	128.7	148.5	128.9	115.2	116.4	121.8	116.4
June 15	130.7	152.1	129.5	115.4	116.5	122.9	118.7
Sept. 15	129.0	144.8	134.0	115.4	116.5	123.1	120.4
Dec. 15	129.5	144.9	135.0	115.2	116.6	125.1	121.7
1944: March 15	129.4	143.3	138.0	115.4	116.8	125.4	122.1
June 15	129.4	144.4	140.2	115.5	92.1	136.9	124.4
Sept. 15	131.8	144.8	141.3	.....	116.6	137.3	126.0
Dec. 15	133.3	148.1	141.8	115.4	116.6	138.0	127.0
1945: March 15	133.2	145.8	142.1	.....	116.6	145.1	128.7
June 15	135.5	150.3	142.6	114.7	120.3	146.1	130.4
Sept. 15	135.3	149.3	143.1	.....	120.5	146.1	130.8
Dec. 15	137.3	153.9	142.5	114.3	120.5	150.4	131.9

McNARY POWER NEEDED FOR SUPERSONIC RESEARCH

(Continued from page 6)

There are two reasons why eastern interests object to McNary Dam—The fear that (1) attractive power rates (public and private) will lure eastern industries into this virgin field of opportunity, and (2) that some of the taxes the East pays into the United States Treasury will be appropriated for the dam on the Columbia.

Completely ignored is the fact that most of the money for Bonneville and Grand Coulee was spent in the East.

Washington's congressional delegation is now wholly sympathetic to McNary Dam. They recognize that, if the supersonic laboratory comes to the Pacific Northwest (possibly in the Big Bend Country, or near Moses La in a section of the 1,200,000 acres to be reclaimed in eastern Washington), existing facilities of Bonneville and Grande Coulee must be supplemented with additional power. For the laboratory ample power is a prerequisite.

Incidentally, the existing Federal plants will continue to supply four pot lines at Troutdale—leased by Reynolds Metals Company—and two aluminum plants near Spokane, leased by Henry J. Kaiser.

CURRENT BUSINESS TRENDS IN OREGON

BANK DEBITS

Bank debits represent the dollar value of the checks drawn against individual bank deposits. Approximately 90 per cent of all goods, property, and services is paid for by check. Bank debits are regarded as indicators of the general trend of business. The Bureau of Business Research collects bank debits from 92 banks and branches monthly. On occasion, the totals for the same month in different issues of the *Review* are not directly comparable because of necessary adjustment of basic data.

Marketing Districts	*Number of Banks Reporting*	*Debits Mar. 1946*	*Debits Feb. 1946*	*Debits Mar. 1945*	*Mar. 1946 compared with Feb. 1946*	*Mar. 1946 compared with Mar. 1945*
Oregon	87	$709,606,994	$588,720,817	$661,648,343	+20.5%	+ 7.2%
Portland (Portland, Hillsboro, Oregon City, etc.)	25	466,105,396	389,175,470	487,330,693	+19.8	− 4.4
Lower Willamette Valley (Salem, McMinnville, etc.)	9	58,587,881	51,332,127	40,291,665	+14.1	+45.4
Upper Willamette Valley (Albany, Corvallis, Eugene, etc.)	11	59,840,006	43,591,683	38,512,319	+37.2	+55.4
North Oregon Coast (Astoria, Tillamook, etc.)	5	15,133,641	12,414,786	12,370,602	+21.9	+22.3
Douglas, Coos Bay	4	12,874,228	12,772,221	9,167,903	+ 0.8	+40.4
Southern Oregon (Ashland, Medford, Grants Pass)	5	24,915,482	21,346,428	16,703,962	+16.7	+49.2
Upper Columbia River (The Dalles, Hood River, etc.)	6	12,495,638	8,665,450	9,395,940	+44.2	+33.0
Pendleton area	6	14,112,164	11,481,882	10,328,930	+22.9	+36.6
Central Oregon (Bend, Prineville, Redmond)	3	7,059,333	5,608,011	5,787,249	+25.9	+22.0
Klamath Falls, Lakeview area	4	20,457,068	16,812,813	16,760,069	+21.7	+22.1
Baker, La Grande area	6	11,869,771	9,971,564	9,900,182	+19.0	+19.9
Burns, Ontario, Nyssa	3	6,156,386	5,548,382	5,098,829	+10.9	+20.7

BUILDING PERMITS

Building permits give an indication of building operations planned rather than actual construction under way. Care must be taken, in interpreting these data, to allow for the lag which may elapse between the issuance of the permit and the beginning of actual construction. The data have been collected by the Bureau of Business Research.

	New Residential Mar. 1946	*New Nonresidential Mar. 1946*	*Additions, Alterations and Repairs Mar. 1946*	*Totals Mar. 1946*	*Totals Feb. 1946*	*Totals Mar. 1945*
Albany	$ 331,000	$ 228,750	$ 14,150	$ 573,900	$ 175,325	$ 6,050
Astoria	47,800	83,200	17,345	148,345	111,050	3,190
Baker	*	*	*	*	14,900	400
Bend	61,900	57,150	23,400	142,450	34,775	50
Coos Bay	41,000	2,500	5,450	48,950	23,050	18,050
Corvallis	*	*	*	*	100,698	8,550
Eugene	122,400	211,800	62,201	396,401	212,365	58,817
Grants Pass	42,773	20,010	7,220	70,003	94,582	19,520
Klamath Falls	29,500	126,375	69,408	225,283	96,480	26,098
La Grande	42,900	4,625	7,650	55,175	*	1,700
Medford	140,900	92,700	17,621	251,221	242,162	12,605
Oregon City	42,200	61,800	55,450	159,450	25,850	4,950
Pendleton	151,100	148,000	28,725	327,825	86,500	7,145
Portland	2,146,740	2,102,520	808,912	5,058,172	2,937,025	658,495
Salem	*	*	*	*	240,539	*
The Dalles	32,100	47,400	24,550	104,050	136,087	3,000
28 other communities	452,765	482,240	82,525	1,017,530	1,290,157	221,124
Total	$3,685,078	$3,669,070	$1,224,607	$8,578,755	$5,821,545	$1,049,744

* No report.

MANUFACTURING EMPLOYMENT

(Source: San Francisco Regional Office, Bureau of Labor Statistics)

Industry	*Feb. 1945*	*Jan. 1946*	*Feb. 1946*
All manufacturing, total	178,200	111,000	109,800
Lumber & timber basic products	50,700	45,900	47,500
Furniture & finished lumber products	5,500	5,800	6,000
Iron and steel, & products	5,200	3,300	3,400
Transportation equipment (except autos)	76,900	14,600	13,500
Machinery, except electrical	4,400	3,100	3,000
All other durable goods	4,000	3,400	3,000
Total, durable goods	146,700	76,100	76,400
Food & kindred products	15,400	17,700	15,800
Textile-mill products	3,300	3,400	3,400
Apparel & other finished fabrics	2,200	2,500	2,500
Paper & allied products	4,400	4,600	4,900
Printing & publishing	3,800	4,100	4,200
All other nondurable goods	2,400	2,600	2,600
Total, nondurable goods	31,500	34,900	33,400

PORTLAND CONSUMER PRICE CHANGES

Dec. 15, 1945 to Mar. 15, 1946

(Source: San Francisco Regional Office, Bureau of Labor Statistics)

The following table shows the percentage change in Portland consumer prices during the three-month period ending March 15.

All items	−1.0%
Food	−2.6
Clothing	+0.8
Fuel, electricity, and ice	+0.6
Rent	unchanged
House furnishings	+3.7
Miscellaneous	−0.9

Dun and Bradstreet report that there were three commercial failures in Oregon in March 1946 involving liabilities of $10,000. This compares with three failures in February 1946 with liabilities of $53,000, and one failure in March 1945 with liabilities of $16,000.